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EXAMINER	
FAULK, DEVONA E	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

Office Action Summary	**Application No.** 10/679,443	**Applicant(s)** LAITINEN ET AL.
	Examiner Devona E. Faulk	**Art Unit** 2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 26 October 2007.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,10,18 and 21-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,10,18 and 21-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 03 October 2007 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/26/2007 has been entered.

Response to Remarks

2. The applicant has amended the claims to overcome the 112 1st rejection set forth in the previous office action.

3. Claims 2,9,11-17,19-20 are cancelled.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 1 recites " global mean... adapted to receive said change of the somatic phenomenon which is sent from the local control means". The specification discloses that the higher level system 52 receives locally measured results (page 13, lines 5-10). The examiner asserts that this does not necessarily equate to " receiving said change of the somatic phenomenon which is sent from the local control means". The examiner has interpreted the limitation to mean that the global control means receives measured results from the local control means.

Claims 4,5,30 and 31 recite "whereby the control means are also responsive to the observation means" and "whereby the control means are adapted to control the regulation means". The specification teaches of the observation means and regulation means on page 8, line 18- page 9, line 14, but fails to provide antecedent basis for the claimed subject matter. The examiner has interpreted the claims as follows: claim 4,"..further includes observation means for measuring the state of the environment of the user. " and claims 5,30 and 31, "..further includes regulation means for regulating the state of the environment of the user. ".

5. The disclosure is objected to because of the following informalities: The specification teaches of three different names for element 52. On page 13, line 9, 52 is a higher level system, on page 14, line 20 52 is a global data system and on page 15, line 30, 52 is a global database. There should only be one name for element 52. Correction is needed.

Claim Objections

6. Claim 1, 30 and 31 are objected to because of the following informalities: Claim 1 recites " global mean... adapted to receive said change of the somatic phenomenon which is sent from the local control means". The specification discloses that the higher level system 52 receives locally measured results (page 13, lines 5-10). The examiner asserts that this does not necessarily equate to " receiving said change of the somatic phenomenon which is sent from the local control means". The examiner has interpreted

the limitation to mean that the global control means receives measured results from the local control means. Appropriate correction is required.

7. Claims 4,5,30 and 31 recite "whereby the control means are also responsive to the observation means" and "whereby the control means are adapted to control the regulation means". The specification teaches of the observation means and regulation means on page 8, line 18- page 9, line 14, but not teach of the control means being responsive to the observation means or the control means adapted to control the regulation means as claimed. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 4,5,30 and 31** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4,5,30 and 31 recite "control means". All three claims depend on claim 1 and claim one recites a local control means and a global control means. The examiner is not clear as to which control means is controlling the regulation means.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. **Claims 1, 3-5, 7, 10, 18, 21-25, 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi et al. (US 6,048,310) in view of Carnes et al. (WO 00/52604 A1).

. Regarding **claim 1**, Yasushi discloses an information distribution device (Figure 1) comprising:

at least one loudspeaker by which audio information is made audible to a user (Figure 1; loudspeaker; 2; column 9,lines 52-55; column 10, lines 48-51);

monitoring means including measuring means for obtaining measurements in the system (10,20 state sensors and biosensors, Figure 1; column 7, lines 6-11),

said measuring means comprising at least one sensor which is connected to the monitoring means and is non-invasively connectable to the user, for measuring at least one biophysiological phenomenon directly from the user (Figure 2B; column 9, lines 63-65) and which produces signals describing a somatic phenomenon directly associated to the user, wherein the monitoring means are adapted to received said signals and measure a change of the somatic phenomenon (somatic is defined as affecting or characteristic of the body as opposed to the mind or spirit; "bodily needs"; biosensors, Figure 1; column 7, lines 6-11; the biosensors include a heartbeat sensor, a pulse sensor, a brain wave sensor and a perspiration sensor which produce signals describing a somatic phenomenon),

an information database storing audio files (ROM 63, RAM 64 of Figure 1 both store audio data; column 9, lines 28-35), and local control means (calculation unit 51 and audio signal information generating unit 61 comprise the local control means, Figure 1) responsive to the monitoring means, adapted to determine on the basis of the measured change of the somatic phenomenon the current state of the user, and perform an operation in accordance with the current state of the user , the operation including a selection of a certain audio file containing speech and/or music from among the audio files stored in the information database and a control of a manner of presentation of the selected audio file through the loudspeaker (the audio signal information generation unit 61 receives the output of the calculation unit (51, which processes data from the biosensors and state sensors) and based on the output signal receives reads out waveform data required for generation of an audio output which is output through loudspeaker 2; column 9, lines 15-55) .

Yasushi discloses that the 50 and 61 are centrally located in a control room. Therefore, a network is obviously present that connects 50 and 61 to each input/output unit located in each room.

Yasushi fails to disclose a global control means as claimed.

Prior art Carnes discloses a global means (web server, 15, Figure 1) operatively connected to control the local control means (client computer ,11, Figure 1) via a communication network and adapted to receive the measured results which sent from the local control means (the measured results being the user's input to the various user profiles and web pages; page 8, line 6-page 12 describe the various web pages and user profiles) ; and analyzing said the measured results by using a meter resulting in a scalar quantity suitable to meter activity and the ability of the user (user profile and various web pages read on meter; page 8, lines 7-13; page 13, line 22-page 14, line 8; for each item on each web page a scalar result is produced , see pages 8-9) and on the basis of the analysis results control operations to be performed by the local control means (Carnes teaches that based on the analysis, the client computer (11) can receive matching entries corresponding to health educational materials that are customized to the user's health predisposition, physiological condition, etc ; page 16, lines 24- 32).

The examiner asserts that the problem addressed by the applicant, the need to provide an intelligent information system, is closely analogous to the task of providing a remote health monitoring system of prior art Carnes. Therefore, it would have been well within the ordinary skill level to implement the system in a different environment.

Regarding **claim 3**, Yasushi as modified by Carnes discloses that the measurement means are adapted to make at least one type of measurement from a group including measurements of the EMG, EEG, and EKG type, and measurements indicating skin conductivity, temperature, blood pressure and frequency of respiration (Yasushi biosensors, Figure 2B).

Regarding **claim 4**, Yasushi as modified by Carnes discloses an observation means for measuring the state of the environment of the user. Yasushi teaches of a pulse sensor. Air pressure can affect pulse so therefore by detecting the pulse or change in pulse, the state of the environment of the user is measured.

Regarding **claim 5**, Yasushi as modified by Carnes fails to explicitly disclose a regulation means for regulating the state of the environment of the user. Yasushi teaches that the monitoring takes place in each patient or resident's room. It is obvious that a room will have some type of regulating means to regulate the state of the environment, be it lighting or room temperature.

Regarding **claim 10,** Yasushi as modified discloses a global control means adapted to control several different local control means, which are separate from each other. Carnes discloses a global system for on-line health monitoring and education. He discloses client computers (11; Figure 1; local means) and a web server (15; Figure 1; global means) adapted to communicate with the local control means through a communication network (page 4, line 23-page 5, line 13); transferring measuring data from the client computers to the server (page 13, line 15-page 14, line 15) and defining control information for the local means (page 13, line 15-page 14, line 15).

Regarding **claim 18**, Yasushi as modified by Carnes fails to explicitly disclose a regulation means for regulating the state of the environment of the user. Yasushi teaches that the monitoring takes place in each patient or resident's room. It is obvious that a room will have some type of regulating means to regulate the state of the environment, be it lighting or room temperature.

Regarding **claim 21**, Yasushi as modified by Carnes discloses wherein the audio information to be made audible to the user is selected on the basis of the current location of the user (column 3, lines 33-54; column 11, line 28-column 13, line 10).

Regarding **claim 22**, Yasushi as modified by Carnes discloses that said meter is a resident assessment instrument. Carnes discloses (user profile and various web pages read on meter; page 8, lines 7-13; page 13, line 22-page 14, line 8). These profiles and web pages are assessment instruments.

Regarding **claim 23**, Yasushi as modified by Carnes discloses that the system is used for rehabilitation of the user. Carnes system is an on-line health monitoring and education tool. The information that the user is to read and follow in order to better his or her condition (page 1, lines 13-17) reads on used for rehabilitation.

Regarding **claim 24**, Yasushi as modified discloses wherein the system is used for education, therapy, or entertainment of said user. Carnes system is an on-line health monitoring and education tool. The information that the user is to read and follow in order to better his or her condition (page 1, lines 13-17) reads on used for education or therapy.

Regarding **claim 25,** Yasushi as modified discloses wherein the system is used in an exhibition for supplying suitable information according to movements of said user. Yasushi teaches that the environment for the audio apparatus is in a hospital or asylum for the aged (column 6, lines 62-66) and that the input/output unit which includes the state sensors and the biosensors are located in each room of a patient or resident (column 7, lines 3-5). Each room is an exhibition space or area.

Regarding **claim 28**, Yasushi as modified by Carnes discloses that the sensor is adapted to make at least one type of measurement from a group including measurements of temperature, blood pressure and frequency of respiration. Yasushi teaches of a pulse sensor and a heartbeat sensor. Carnes teaches of a blood pressure sensor; 29f, page 5, lines 26-27). In view of Carnes disclosure of a blood pressure sensor a person of ordinary skill in the art would have a reasonable expectation that a blood pressure sensor within the claimed scope could have been successfully obtained.

Regarding **claim 30**, Yasushi as modified by Carnes fails to explicitly disclose a regulation means for regulating the state of the environment of the user. Yasushi teaches that the monitoring takes place in each patient or resident's room (column 7, lines 3-5). It is obvious that a room will have some type of regulating means to regulate the state of the environment, i.e. lighting or room temperature and either of these read on non-audio.

Regarding **claim 31**, Yasushi as modified by Carnes fails to explicitly disclose a regulation means for regulating the state of the environment of the user. Yasushi teaches that the monitoring takes place in each patient or resident's room (column 7, lines 3-5). It is obvious that a room will have some type of regulating means to regulate the state of the environment, i.e. lighting or room temperature and either of these read on non-audio.

7. **Claims 6 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi et al (US 6,048,310) as applied above to claim 1 and Carnes et al. (WO 00/52604 A1) as applied above to claim 1 in view of Osorio et al. (US 6,549,804).

Regarding **claim 6**, Yasushi as modified by Carnes fails to disclose adjusting the somatic operation of the user. Osorio discloses adjusting the somatic operation of the user (column 9, lines 21-27). It would have been obvious to modify Yasushi as modified to adjust the somatic operation of the user for the prevention or abatement of certain medical conditions.

Regarding **claim 8,** Yasushi as modified by Carnes fails to disclose that the system is characterized in that it is incorporated into a portable player. Osorio teaches of a system that monitors biophysiological changes in the brain incorporated in a portable player (column 9, lines 48-53; column 4, lines 54-57). It would have been obvious to modify Yasushi as modified so that the system is incorporated in a portable player as taught by Osorio in order to provide more mobility for the user.

12. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi et al. (US 6,048,310) as applied above to claim 1 in view of Carnes et al. (WO 00/52604 A1) as applied above to claim 1 in further view of Tiecher et al. (US 6,475,161).

Regarding **claim 26,** Yasushi as modified fails to disclose wherein in order to detect movements of said user the measurement means comprise at least one of the following devices: a video camera, an acceleration transducer, a gyroscope. Teicher discloses using a video camera to detect the movements of a subject (column 3, lines 22-25). It would have been obvious to modify Yasushi as modified by including a video camera that would help detect the movement of the user in order to better assess any impairment of motor functions that the user may have.

13. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi et al. (US 6,048,310) in view of Carnes et al. (WO 00/52604 A1) in further view of DeSimone et al. (US 5,539,860).

Regarding **claim 27**, Yasushi as modified teaches that the state sensors include a microphone (14, Figure 2A) and of biosensors (Figure 2B). Yasushi as modified fails to disclose wherein the measurement means uses speech recognition to evaluate the somatic phenomenon. DeSimone discloses that a user (34) provides an utterance by speaking into microphone (18) (column 4, lines 21-26). That utterance is summed with a bio-signal and that summed signal is passed to an audio card (17) which performs speech recognition (column 4, lines 45-50) and is used to evaluate somatic phenomenon (see abstract). It would have been obvious to modify Yasushi as modified to include a speech recognition process to help evaluate the somatic condition of the user to better access when there has been a change in the user's emotional state.

14. **Claims 7 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasushi et al. (US 6,048,310) in view of Carnes et al. (WO 00/52604 A1) in further view of Musha (US 5,601,090).

Regarding claim 7, Yasushi as modified by Carnes discloses that the measurement means comprise sensors located on the user, the sensors being adapted to measure the nature of movements of the user (biosensors 21-24, Figure 2B; column 9, lines 63-65). Yasushi as modified fails to disclose that the nature of movements includes movements of the user's eyes. Musha discloses an apparatus and method for automatically determining somatic state that includes detecting eye movement (abstract; column 2, lines 49-35). It would have been obvious to modify Yasushi as modified by Carnes to include eye detection to better access the user's somatic state.

Regarding claim 7, Yasushi as modified by Carnes discloses that the measurement means comprise sensors located on the user, the sensors being adapted to measure the nature of movements of the user (biosensors 21-24, Figure 2B; column 9, lines 63-65). Yasushi as modified fails to disclose that the nature of movements includes movements of the user's eyes. Musha discloses an apparatus and method for automatically determining somatic state that includes detecting eye movement (abstract; column 2, lines 49-35). It would have been obvious to modify Yasushi as modified by Carnes to include eye detection to better access the user's somatic state.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devona E. Faulk whose telephone number is 571-272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/
Examiner
Art Unit 2615
1/27/2008